

REMARKS

In this Response, claims 1, 31 and 32 have been amended. Claims 2-4, 7-9, and 34-35 have been canceled. Claims 1, 5, 6, 10-33, and 36-46 are now pending in the application. No new matter has been added.

I. Communication with the Examiner

Applicants thank the Examiner for contacting Applicants' attorney, Kevin Canning, on June 10, 2009. At that time, and in several subsequent conversations, Applicants' attorney and the Examiner have discussed potential amendments to the claims. The Examiner has made several suggestions that Applicants have accepted. Applicants understood that they have reached an agreement and have forwarded a revised set of claims to the Examiner. However, the Office Action mailed on August 3, 2009, does not address the agreement and deals with the claims as they stood prior to the communications. Subsequent efforts to contact the Examiner have been unsuccessful.

Applicants urge the Examiner to contact the Applicants' attorney upon receiving of this Response if the Examiner believes it beneficial for efficient prosecution of this Application.

II. Summary of Claim Rejections

Claims 1 and 3-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,926,775 to Brumley et al. (hereinafter "Brumley"), in view of U.S. Patent Application Publication No. 2001/0047385 to Tuatini (hereinafter "Tuatini"), and further in view of U.S. Patent 6,689,319 to Fisher et al. (hereinafter "Fisher").

Claims 10-14, 19-25, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of U.S. Patent Application Publication No. 2004/0088349 to Beck et al. (hereinafter "Beck"), and further in view of Fisher.

Claims 15, 16, 18, and 26-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Beck, in view of Fisher, and further in view of U.S. Patent No. 6,614,916 to MacDonald (hereinafter “MacDonald”).

Claims 17 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Beck, in view of Fisher, and further in view of U.S. Patent No. 5,201,027 to Casini (hereinafter “Casini”).

Claims 32-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brumley, in view of Fisher, in view of U.S. Patent No. 5,778,328 to Trsar et al. (hereinafter “Trsar”), and further in view of U.S. Patent Application Publication No. 2004/0119620 to Tran et al. (hereinafter “Tran”).

Claims 43, 44, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Trsar, in view of Fisher, in view of MacDonald, and further in view of Tran.

Claim 45 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Fisher, in view of Trsar, in view of Casini, and further in view of Tran.

III. Rejections under 35 U.S.C. § 103(a)

A. Claims 1 and 3-6

Claims 1 and 3-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Tuatini, and further in view of Fisher. Claims 3 and 4 have been canceled. Applicants respectfully traverse the above 35 U.S.C. § 103(a) rejection of claims 1 and 5-6 for at least the reasons set forth below.

Applicants respectfully submit that Brumley, Tuatini, and Fisher, alone or in any reasonable combination, do not disclose or suggest at least the following features of claim 1: “receiving a request to access the image acquisition device, the request specifying a format for a response from the image acquisition device,” “establishing a communication channel with a

hardware interface of the image acquisition device, the communication channel operating independently of the interface protocol of the image acquisition device,” “accessing a feature of the image acquisition device using the communication channel to receive the response in the specified format,” and “specifying a color space for images acquired by the image acquisition device.”

The Examiner alleges that Brumley discusses “the request specifying a format for a response from the image acquisition device” but does not discuss receiving “the response in the specified format” (Office Action, page 4). Applicants respectfully submit, however, that it is not logical for a reference to disclose or suggest one of these two elements, but not the other. That is, the purpose of a request that specifies a format for a response is for the requesting object to receive a response in the specified format. Since the Examiner acknowledges that Brumley does not discuss “receiving the response in the specified format,” it is not logically consistent to conclude that Brumley discusses “specifying a format for a response from the image acquisition device.”

In fact, the cited portion of Brumley discusses including backwards compatibility for prior art DAQ driver invocations. Brumley states that if the DAQ user application’s call to the DAQ driver level software is a vectored call, then the Brumley DAQ driver level software architecture system dispatches the call to the appropriate physical DAQ device (col. 11, lines 1-6). However, if the call is not a vectored call, a “prior art DAQ driver level software architecture implementation is used” (col. 10, lines 57-67). Thus, in Brumley, the format of the call dictates which driver is called, but the call itself does not specify anything about “a format for a response from the image acquisition device.” Tuatini and Fisher also do not disclose or suggest “the request specifying a format for a response from the image acquisition device.” Thus, Brumley, Tuatini, and Fisher, alone or in any reasonable combination, do not disclose or suggest this feature.

The Examiner further acknowledges that “Brumley and Tuatini do not teach establishing a communication channel with a hardware interface of the image acquisition device” (Office Action, page 3). Thus, it is only logical that neither Brumley nor Tuatini can disclose or suggest that such a communication channel operates independently of the interface protocol of the image

acquisition device. Fisher also does not disclose or suggest “establishing a communication channel with a hardware interface of the image acquisition device, the communication channel operating independently of the interface protocol of the image acquisition device.” Thus, Brumley, Tuatini, and Fisher, alone or in any reasonable combination, do not disclose or suggest this feature.

The Examiner cites Fisher as teaching “establishing a communication channel with a hardware interface of the image acquisition device, the communication channel operating independently of the interface protocol of the image acquisition device.” Applicants respectfully disagree.

Fisher deals with controlling “a printhead for depositing a fluid to form the array of features on the substrate surface and a camera for imaging the deposited features.” (Fisher, Abstract). The camera of Fisher is tightly coupled to the printhead apparatus and a very specific controller is used to control the camera. (Fisher, column 6, lines 25-65).

The cited passages of Fisher only mention “a channel” that can be set aside “to independently control the activation of other devices such as an image acquisition system.” The channel of Fisher is set aside from other channels used to control the printhead. While Fisher mentions the word “independent,” it merely suggests that this channel is not the same as the channels for controlling the printhead. Nowhere in Fisher is there a mention of a protocol used for controlling the image acquisition device, or that the communication channel operates independently of the interface protocol of the image acquisition device. Not only is such protocol neither discussed nor suggested, the independence from the interface protocol would be entirely contrary to the teachings of Fisher, where the imaging device is discussed as being rigidly and permanently mounted in conjunction with the printing device. (Fisher, columns 7 and 8).

Furthermore, given the specificity of the imaging device and its rigid mounting of Fisher, there would no motivation at the time of the invention to combine the teachings of Brumley, Tuatini and Fisher, because the system of Fisher could not benefit from teachings of Brumley and Tuatini, and vice versa.

Amended claim 1 recites a feature of “specifying a color space for images acquired by the image acquisition device.” This feature has previously been present in Claim 31. The Examiner has cited Cassini for teaching this feature. Applicants respectfully disagree.

The feature of specifying a color space refers to configuration of properties of the image acquisition device, whereas Cassini merely teaches allowing a user “to select the fundamental colors, change them and partially superimpose them, with simultaneous on-screen display...” That is, in the system of Cassini the selection of colors is performed on an on-screen image, not as part of configuring an image acquisition device.

Applicants respectfully submit that the Examiner has not set forth a reasonable prima facie case of obviousness under 35 U.S.C. § 103.

Claims 5-6 depend from and incorporate all of the features of claim 1. Accordingly, claims 3-6 are patentable for at least the same reasons as set forth above with respect to claim 1.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claims 1 and 5-6.

B. Claims 10-14, 19-25, and 30

Claims 10-14, 19-25, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Beck, and further in view of Fisher.

Applicants respectfully submit that Brumley, Beck, and Fisher, alone or in any reasonable combination, do not disclose or suggest at least the following features of claim 10: “establishing a first communication link between a user of the electronic device and an image acquisition engine, the first communication link operating independently of a hardware interface of the selected image acquisition device” and “establishing a second communication link between the image acquisition engine and an interface of the selected image acquisition device, the second communication link operating independently of the interface protocol of the selected image acquisition device to allow the user to communicate with the selected image acquisition device.”

The Examiner alleges that Brumley discusses a first communication link between a DAQ user application and an interpreter performing DAQ driver level functions (Office Action, page 6). The alleged link between the user application and the interpreter, however, is not operating “independently of a hardware interface of the selected image acquisition device,” as required by claim 10. Instead, Brumley’s interpreter is within a DAQ device object, and a DAQ device object is an object that corresponds “to [a] particular device installed in the DAQ system” (Brumley, Fig. 3; col. 7, lines 61-63). Thus, Brumley expressly teaches away from the DAQ device object operating independently of a hardware interface of the selected image acquisition device. Accordingly, Brumley does not disclose or suggest “a first communication link between a user of the electronic device and an image acquisition engine, the first communication link operating independently of a hardware interface of the selected image acquisition device.” Beck and Fisher do not cure the deficiencies of Brumley with respect to this feature. Thus, Brumley, Beck and Fisher, alone or in any reasonable combination, do not disclose or suggest this feature.

In addition, claim 10 recites “establishing a second communication link between the image acquisition engine and an interface of the selected image acquisition device, the second communication link operating independently of an interface protocol of the selected image acquisition device to allow the user to communicate with the selected image acquisition device” (emphasis added). The Examiner, however, does not point out how the cited references disclose or suggest that the alleged second communication link is “operating independently of an interface protocol of the selected image acquisition device.” Thus, Applicants respectfully submit that the Examiner has not set forth a prima facie case of obviousness under 35 U.S.C. § 103.

The Examiner alleges that Fisher teaches “establishing a communication channel with a hardware interface of the image acquisition device, the communication channel operating independently of the interface protocol of the image acquisition device.” Applicants respectfully disagree. As discussed above, in connection with Claim 1, Fisher does not address the interface protocol of the acquisition device. Furthermore, to the best of Applicants’ understanding, the communication channel of Fisher is arranged to suit the image acquisition device. Thus, Brumley, Beck and Fisher, alone or in any reasonable combination, do not disclose or suggest this feature.

Claims 11-14, 19-25, and 30 depend from and incorporate all of the features of claim 10. Accordingly, claims 11-14, 19-25, and 30 are patentable for at least the same reasons as set forth above with respect to claim 10.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claims 10-14, 19-25, and 30.

C. Claims 15, 16, 18, and 26-29

Claims 15, 16, 18, and 26-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Beck, in view of Fisher, and further in view of MacDonald.

Claims 15, 16, 18, and 26-29 depend from and incorporate all of the features of claim 10.

As discussed above with respect to claim 10, Brumley, Beck, and Fisher, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 10. For example, Brumley, Beck, and Fisher, alone or in any reasonable combination, do not disclose or suggest “establishing a first communication link between a user of the electronic device and an image acquisition engine, the first communication link operating independently of a hardware interface of the selected image acquisition device.” MacDonald does not cure the deficiencies of Brumley, Beck, and Fisher with respect to this feature. Thus, Brumley, Beck, Fisher, and MacDonald, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 10, and thus, of dependent claims 15, 16, 18, and 26-29.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claims 15, 16, 18, and 26-29.

D. Claims 17 and 31

Claims 17 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Beck, in view of Fisher, and further in view of Casini.

Claims 17 and 31 depend from and incorporate all of the features of claim 10.

As discussed above with respect to claim 10, Brumley, Beck, and Fisher, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 10. For example, Brumley, Beck, and Fisher, alone or in any reasonable combination, do not disclose or suggest “establishing a first communication link between a user of the electronic device and an image acquisition engine, the first communication link operating independently of a hardware interface of the selected image acquisition device.” Casini does not cure the deficiencies of Brumley, Beck, and Fisher with respect to this feature. Thus, Brumley, Beck, Fisher, and Casini, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 10, and thus, of dependent claims 17 and 31.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claims 17 and 31.

E. Claims 32-42

Claims 32-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brumley, in view of Trsar, and further in view of Tran.

Claims 34-35 have been canceled

Applicants respectfully submit that Brumley, Trsar, Fisher, and Tran, alone or in any reasonable combination, do not disclose or suggest at least the following features of claims 32 and 38: “automatically determining available types of triggers supported by a particular image acquisition device,” “providing information on the available types of triggers supported by the particular image acquisition device,” and “creating a communication channel with the particular image acquisition device, the communication channel operating independently of the interface protocol of the image acquisition device.”

The Examiner acknowledges that Brumley, Fisher and Trsar do not “automatically determine available types of triggers supported by a particular image acquisition device,” but alleges that Tran discusses this feature. Applicants respectfully disagree.

Tran describes a system for triggering multiple test and measurement devices synchronously. An image acquisition device is not a test or measurement device. Furthermore,

the cited portions of Tran describe decoding of triggering events (Tran, ¶ [0022]). That is, event decoders are used to examine signals to determine whether a predefined triggering condition exists (Tran, ¶ [0019]). Applicants respectfully submit that determining when a triggering condition exists is not equivalent to “automatically determining available types of triggers supported by a particular image acquisition device.” Thus, Brumley, Fisher, Trsar, and Tran, alone or in any reasonable combination, do not disclose or suggest this feature.

In addition, the Examiner acknowledges that Brumley does not discuss “providing information on the available types of triggers supported by the particular image acquisition device,” but alleges that Trsar discusses this feature (Office Action, page 12). Applicants respectfully disagree.

The Examiner points out that Trsar states that “the engine analyzer 10 supports all of the three standard types of triggering for digital display scopes in engine analyzers.” Digital display scopes are not image acquisition devices. Instead, digital display scopes visually represent measurements of signals, so the images shown on a display scope are computed, not acquired, by the scope. In addition, mere support for triggering does not disclose or suggest that “information on the available types of triggers supported” is being provided.

The Examiner also cites Trsar, col. 7, lines 3-11, which describes a “Trigger Check routine.” However, the Examiner ignores the context of the routine, which is “to determine if a frame of data contains a trigger point” (Trsar, col. 7, lines 1-3). That is, Trsar’s Trigger Check routine determines whether or not a frame of data that has been captured by the data acquisition hardware contains a trigger point. Determining whether a frame of data contains a trigger point is not equivalent to “providing information on the available types of triggers supported by the particular image acquisition device.” Tran does not remedy the deficiencies of Brumley and Trsar with respect to this feature. Therefore, Brumley, Fisher, Trsar, and Tran, alone or in any reasonable combination, do not disclose or suggest this feature.

Claims 33, 36-37 depend from and incorporate all of the features of claim 32. Accordingly, claims 33-37 are patentable for at least the same reasons as set forth above with respect to claim 32.

Claims 39-42 depend from and incorporate all of the features of claim 38. Accordingly, claims 39-42 are patentable for at least the same reasons as set forth above with respect to claim 38.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claims 32, 33, 36-42.

F. Claims 43, 44, and 46

Claims 43, 44, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Trsar, in view of Fisher, MacDonald, and further in view of Tran.

Claims 43, 44, and 46 depend from and incorporate all of the features of claim 38.

As discussed above with respect to claim 38, Brumley, Fisher, Trsar, and Tran, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 38. For example, Brumley, Trsar, and Tran, alone or in any reasonable combination, do not disclose or suggest “automatically determining available types of triggers supported by a particular image acquisition device.” MacDonald does not cure the deficiencies of Brumley, Trsar, and Tran with respect to this feature. Thus, Brumley, Fisher, Trsar, Tran, and MacDonald, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 38, and thus, of dependent claims 43, 44, and 46.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claims 43, 44, and 46.

G. Claim 45

Claim 45 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brumley, in view of Trsar, in view of Fisher, in view of Casini, and further in view of Tran.

Claim 45 depends from and incorporates all of the features of claim 38.

As discussed above with respect to claim 38, Brumley, Fisher, Trsar, and Tran, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 38. For example, Brumley, Fisher, Trsar, and Tran, alone or in any reasonable combination, do not disclose or suggest “automatically determining available types of triggers supported by a particular image acquisition device.” Casini does not cure the deficiencies of Brumley, Fisher, Trsar, and Tran with respect to this feature. Thus, Brumley, Trsar, Tran, and Casini, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 38, and thus, of dependent claim 45.

For at least the reasons set forth above, Applicants respectfully request the Examiner to reconsider and to withdraw the above 35 U.S.C. § 103 rejections of claim 45.

CONCLUSION

In light of the above amendments and arguments, Applicants respectfully submit that all of the pending claims are in condition for allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicants' attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-034RCE. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: November 3, 2009

Respectfully submitted,

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